

Application No. 10/613,587
Response to Office Action of May 27, 2005

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A heat transfer recording sheet comprised of a support layer; an adhesive layer; and at least one ink receiving layer comprising a microporous polymeric film including at least one thermoplastic polymer, wherein the microporous polymeric film is hydrophilic and the at least one thermoplastic polymer is a copolymer comprising at least one polyolefin and at least one polar functional monomer.

2. (Original) The heat transfer recording sheet according to claim 1 further comprising a release layer between said support layer and said adhesive layer.

3. (Original) The heat transfer recording sheet according to claim 2 wherein said release layer is comprised of wax or silicon.

4. (Original) The heat transfer recording sheet according to claim 1 wherein the thickness of said microporous polymeric film is 10 to 100 μm .

5. (Cancelled)

6. (Currently Amended) The heat transfer recording sheet according to claim 5 1 wherein said polyolefin is selected from the group consisting of butadiene, polyethylene and polypropylene.

7. (Cancelled)

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8. (Currently Amended) The heat transfer recording sheet according to claim 7 1, wherein said polyolefin is polypropylene.

9. (Currently Amended) The heat transfer recording sheet according to claim 7 1, wherein said monomer is selected from the group consisting of acrylic acid, acrylate, methacrylic acid, methacrylate, maleic acid, maleic anhydride, vinyl acetate, vinyl alcohol, vinyl chloride, vinylidene chloride and styrene.

10. (Original) The heat transfer recording sheet according to claim 1 wherein said microporous polymeric film further comprises a hydrophilic polymer melt additive to form a blend.

11. (Original) The heat transfer recording sheet according to claim 10 wherein said polymeric melt additive is comprised of a surfactant.

12. (Original) The heat transfer recording sheet according to claim 10 wherein the amount of thermoplastic polymer in said blend is between 80 and 99.9% by dry weight and the amount of polymeric melt additive in the blend is between 0.1% and 20% by dry weight.

13. (Original) The heat transfer recording sheet according to claim 1 wherein said ink receiving layer is coated with at least an additional ink receiving layer.

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14. (Original) The heat transfer recording sheet according to claim 13 wherein said additional ink receiving layer is comprised of a microporous polymeric film.

15. (Original) The heat transfer recording sheet according to claim 13 wherein said additional ink receiving layer is comprised of a microparticle coating of inorganic pigment and binder.

16. (Original) The heat transfer recording sheet according to claim 15 wherein said inorganic pigment is selected from the group consisting of calcium carbonate, alumina, silica, and as a combination of at least two of the above.

17. (Original) The heat transfer recording sheet according to claim 15 wherein said binder is selected from the group consisting of polyurethane, polyvinyl alcohol, and modified polyvinyl alcohol.

18. (Cancelled)

19. (Original) The heat transfer recording sheet according to claim 1 wherein said support layer is comprised of a material selected from the group consisting of paper, cloth, nonwoven fabric and thermo heat-resistant plastic film.

20. (Original) The heat transfer recording sheet according to claim 1 wherein said microporous polymeric film is ink jet printable.

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21-22. (Cancelled)**

23. (New) The heat transfer recording sheet according to claim 1 wherein said adhesive layer comprises at least one pressure sensitive adhesive.

24. (New) The heat transfer recording sheet according to claim 1, wherein said adhesive layer comprises at least one material selected from the group consisting of a silicon based pressure sensitive adhesive, an acrylic based pressure sensitive adhesive, a polyolefin copolymer, a polyvinyl alcohol, an ethylene vinyl acetate, an ethylene acrylate, and a polyvinyl acetate.

25. (New) The heat transfer recording sheet according to claim 1, wherein said polyolefin is butadiene and said monomer is styrene.

26. (New) The heat transfer recording sheet according to claim 25, wherein said copolymer further comprises acrylonitrile.

27. (New) The heat transfer recording sheet according to claim 1, wherein said adhesive layer is in between 0.5 and 50 μm .